

# FILE NOTATIONS

Entered in NID File ✓

Entered On S R Sheet           

Location Map Pinned ✓

Card Indexed ✓

I W R for State or Fee Land           

Checked by Chief           

Copy NID to Field Office           

Approval Letter ✓ *Approval sent 1-3-79*

Disapproval Letter           

## COMPLETION DATA:

Date Well Completed 3-15-77

Location Inspected Storage

OW            WW            TA           

Bond released           

GW            OS            PA           

State of Fee Land           

## LOGS FILED

Driller's Log ✓

Electric Logs (No. ) ✓

E            I            E-I            GR            GR-N            Micro           

Lat            Mi-L            Sonic            Others

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. ML - 807		
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER Gas Storage <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
2. NAME OF OPERATOR Mountain Fuel Supply Company			7. UNIT AGREEMENT NAME Clay Basin Unit		
3. ADDRESS OF OPERATOR P. O. Box 1129 Rock Springs, Wyoming 82901			8. FARM OR LEASE NAME Unit Well		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) At surface 860' FSL, 840' FEL SE SE At proposed prod. zone			9. WELL NO. 27-S		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 40 miles south of Rock Springs, Wyoming			10. FIELD AND POOL, OR WILDCAT Clay Basin		
16. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SE SE 16-3N-24E		
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.			12. COUNTY OR PARISH Daggett		
19. PROPOSED DEPTH 6060'			13. STATE Utah		
21. ELEVATIONS (Show whether DF, RT, GR, etc.) GR 6584.5'			17. NO. OF ACRES ASSIGNED TO THIS WELL -		
23. PROPOSED CASING AND CEMENTING PROGRAM			20. ROTARY OR CABLE TOOLS Rotary		
22. APPROX. DATE WORK WILL START* March 1, 1976					

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4	9-5/8" new	36# K-55	300'	180 sx, 3% CaCl
8-3/4	7" new	23# K-55	6060'	To be determined

We would like to drill the subject well to an estimated depth of 6060', anticipated formation tops are as follows: Mancos at the surface, Frontier at 5410', Mowry at 5610', and Dakota at 5860'.

Mud will be adequate to contain formation fluids and in sufficient quantities to efficiently drill the well; blowout preventers will be checked daily and pressure tested after each string of casing is set; 100' core (50' Mowry and 50' Dakota), no DST's; no mud logging unit, 12 days drilling time; no abnormal temperatures, pressures, or H2S anticipated; probably run Dual Induction-Laterolog, Sonic, and Density.

Approved in accordance  
with Order issued in  
Order #164-1.

APPROVED BY THE DIVISION OF  
OIL, GAS, AND MINING

DATE: Dec 30, 1976

BY: [Signature]

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED [Signature] TITLE Manager, Drilling and Petroleum Engineering DATE Dec. 28, 1976

(This space for Federal or State office use)

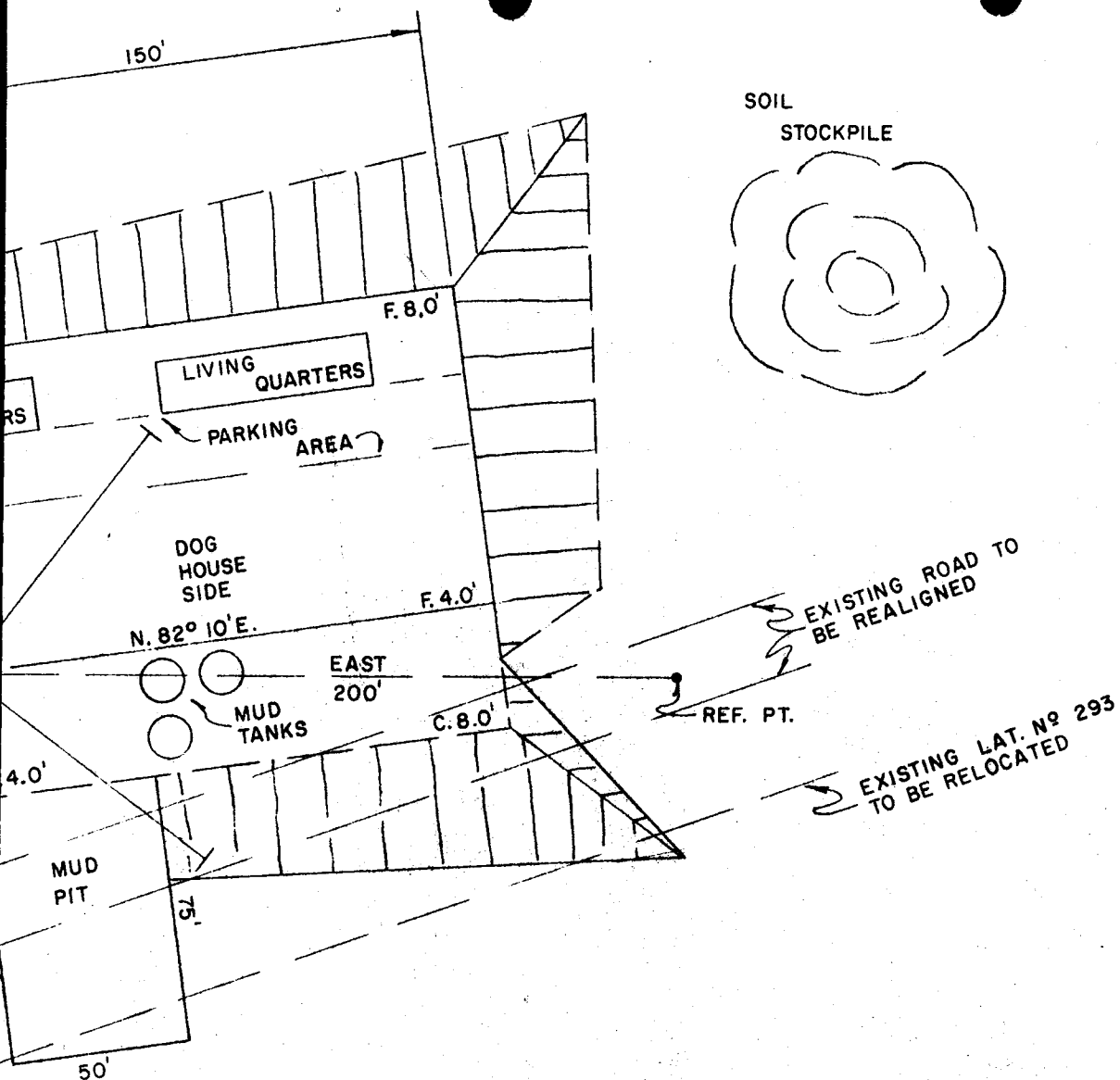
PERMIT NO. 43-009-30618

APPROVAL DATE

APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE



REF. PT.

GRADED WELL SITE PLAN  
SCALE 1" = 50'

DRILLING W.O.

LEGEND

- ⊕ WELL
- ⊕ STONE CORNER
- ⊕ PIPE CORNER

ENGINEERING RECORD

SURVEYED BY	S. M. FABIAN
REFERENCES	G.L.O. PLAT <input checked="" type="checkbox"/> U.S.G.S. QUAD. MAP <input type="checkbox"/>
LOCATION DATA	
FIELD	CLAY BASIN
LOCATION: SE 1/4, SE 1/4, SEC. 16, T. 3N., R. 24E., 860' FSL 840' FEL.	
DAGGETT COUNTY, UTAH	
WELL ELEVATION: 6584.5 (AS GRADED) BY VERTICAL ANGLE OBSERVATION (ELECTRONIC) FROM COMPANY BENCH MARK $\Delta$ 115	

REVISIONS

NO.	DESCRIPTION	DATE	BY

**MOUNTAIN FUEL**  
SUPPLY COMPANY  
ROCK SPRINGS, WYOMING

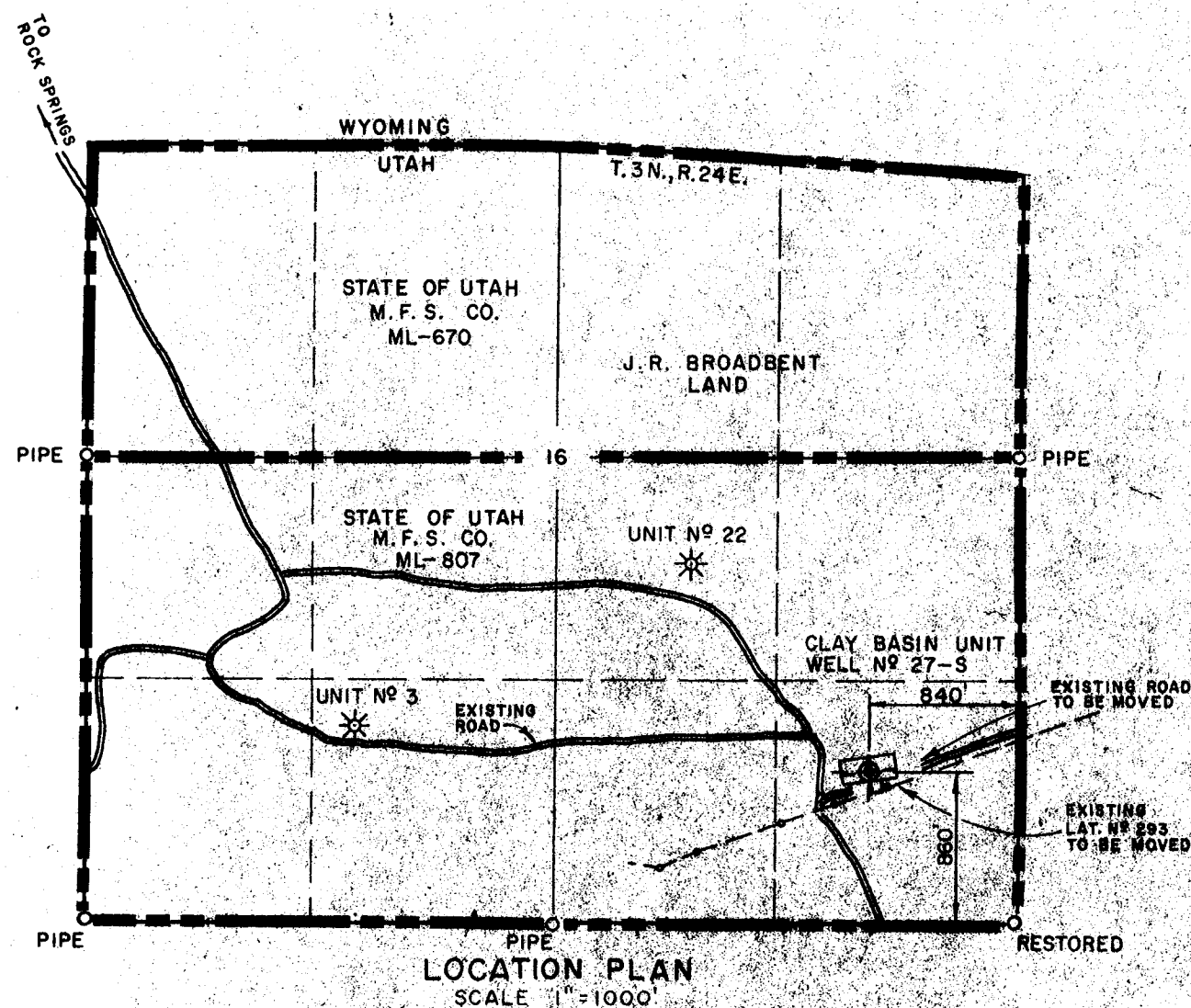
CERTIFIED WELL LOCATION  
AND  
WELL SITE PLAN  
CLAY BASIN UNIT WELL N° 27-S

DRAWN: 11-15-76 GEB SCALE: AS NOTED

CHECKED: GcL | SMC DRWG. NO. M-12312

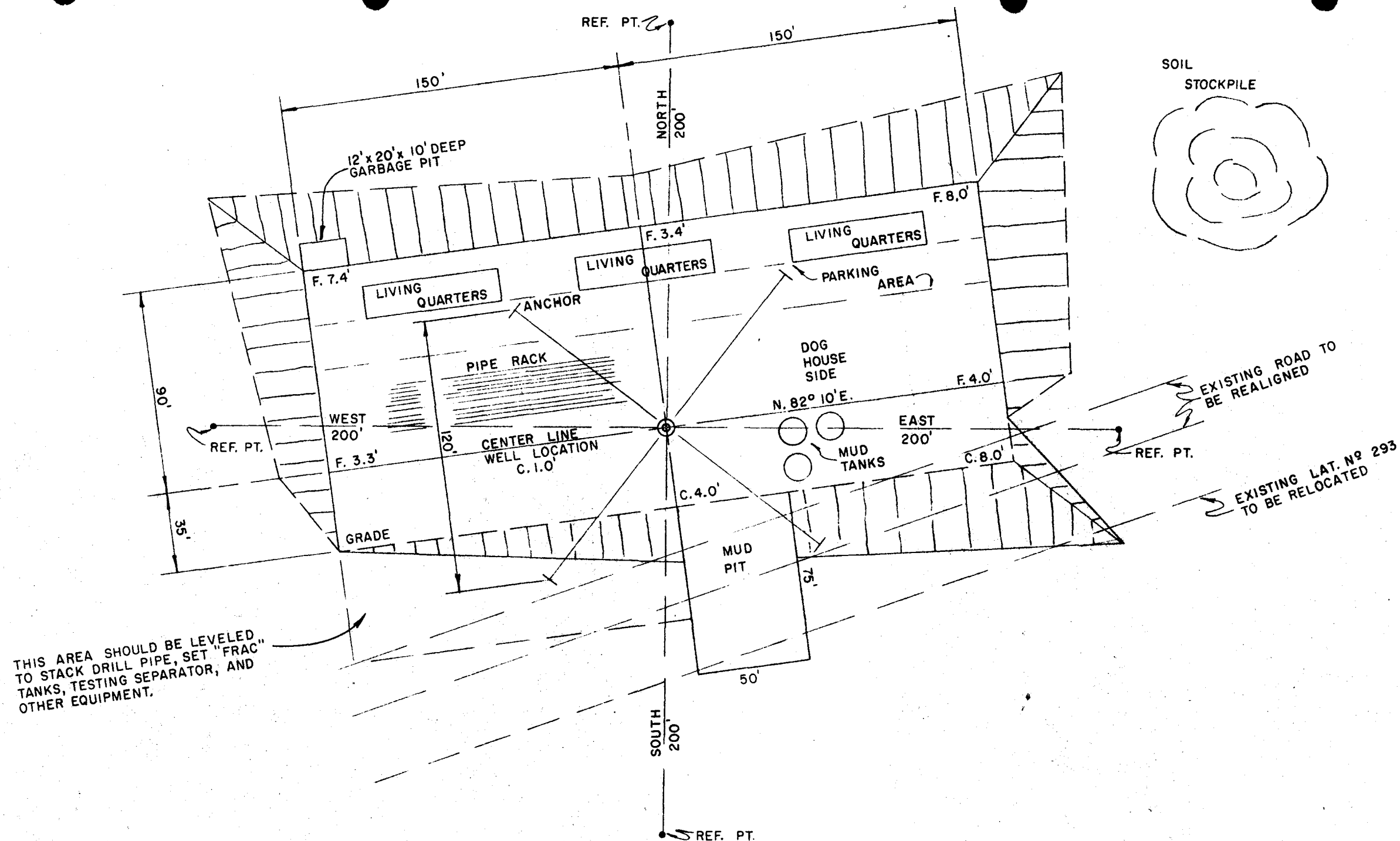
APPROVED: RMH NO. 2




FILE NO. A-11 SHEET 1 OF 2

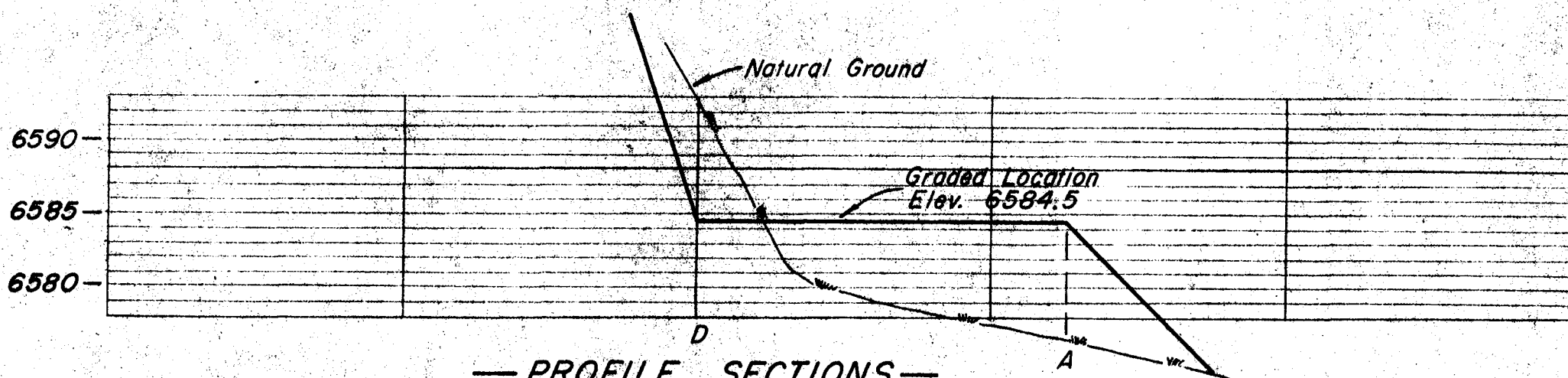
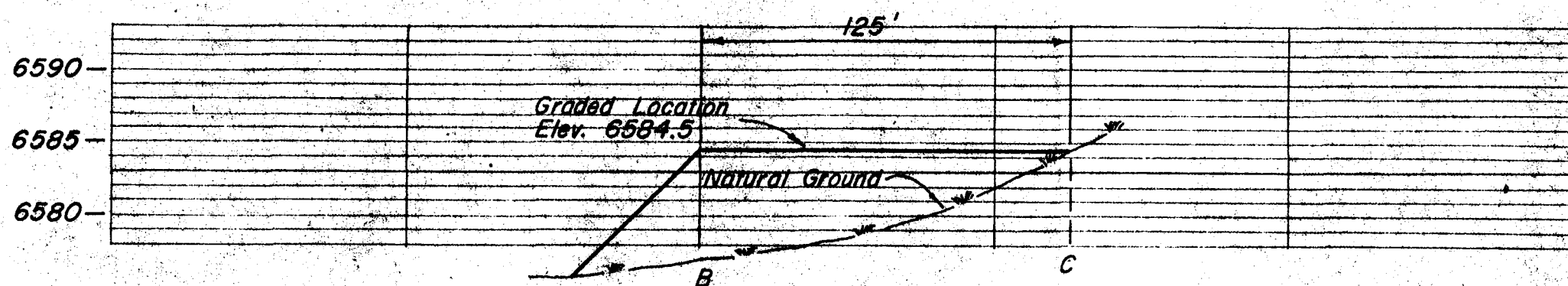
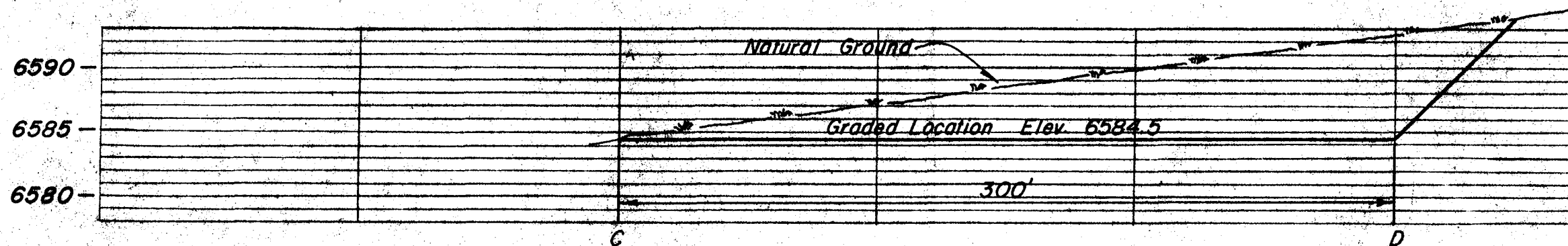
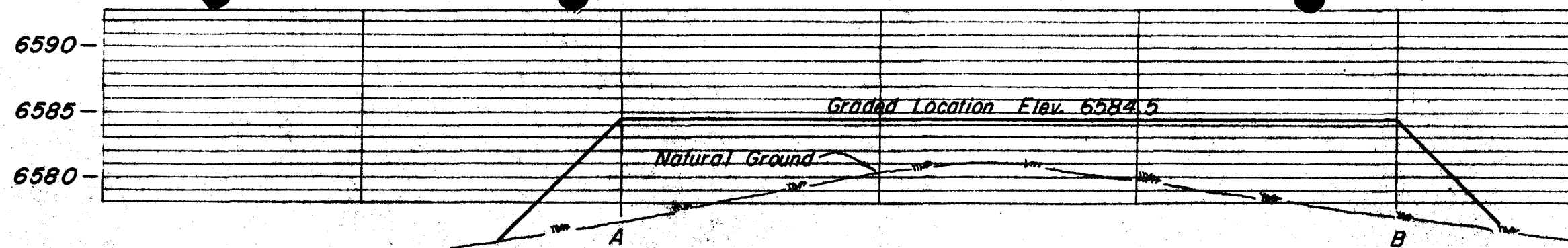


This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge.

*[Signature]*  
ENGINEER  
UTAH REGISTRATION L.S. N° 3521



LEGEND		ENGINEERING RECORD	
	WELL	SURVEYED BY	S. M. FABIAN
	STONE CORNER	REFERENCES	G.L.O. PLAT <input checked="" type="checkbox"/> U.S.G.S. QUAD. MAP <input type="checkbox"/>
	PIPE CORNER	LOCATION DATA	
		FIELD	CLAY BASIN
		LOCATION: SE 1/4, SE 1/4, SEC. 16, T. 3 N., R. 24 E., 860' FSL 840' FEL.	
		DAGGETT COUNTY, UTAH	
		WELL ELEVATION: 6584.5 (AS GRADED) BY VERTICAL ANGLE OBSERVATION (ELECTRONIC) FROM COMPANY BENCH MARK $\Delta$ 115	



— PROFILE SECTIONS —  
 PROPOSED GRADED LOCATION  
 HORIZ 1" = 50'  
 VERT 1" = 10'



Location Elev. 6584.5

B

Location Elev. 6584.5


300'

D



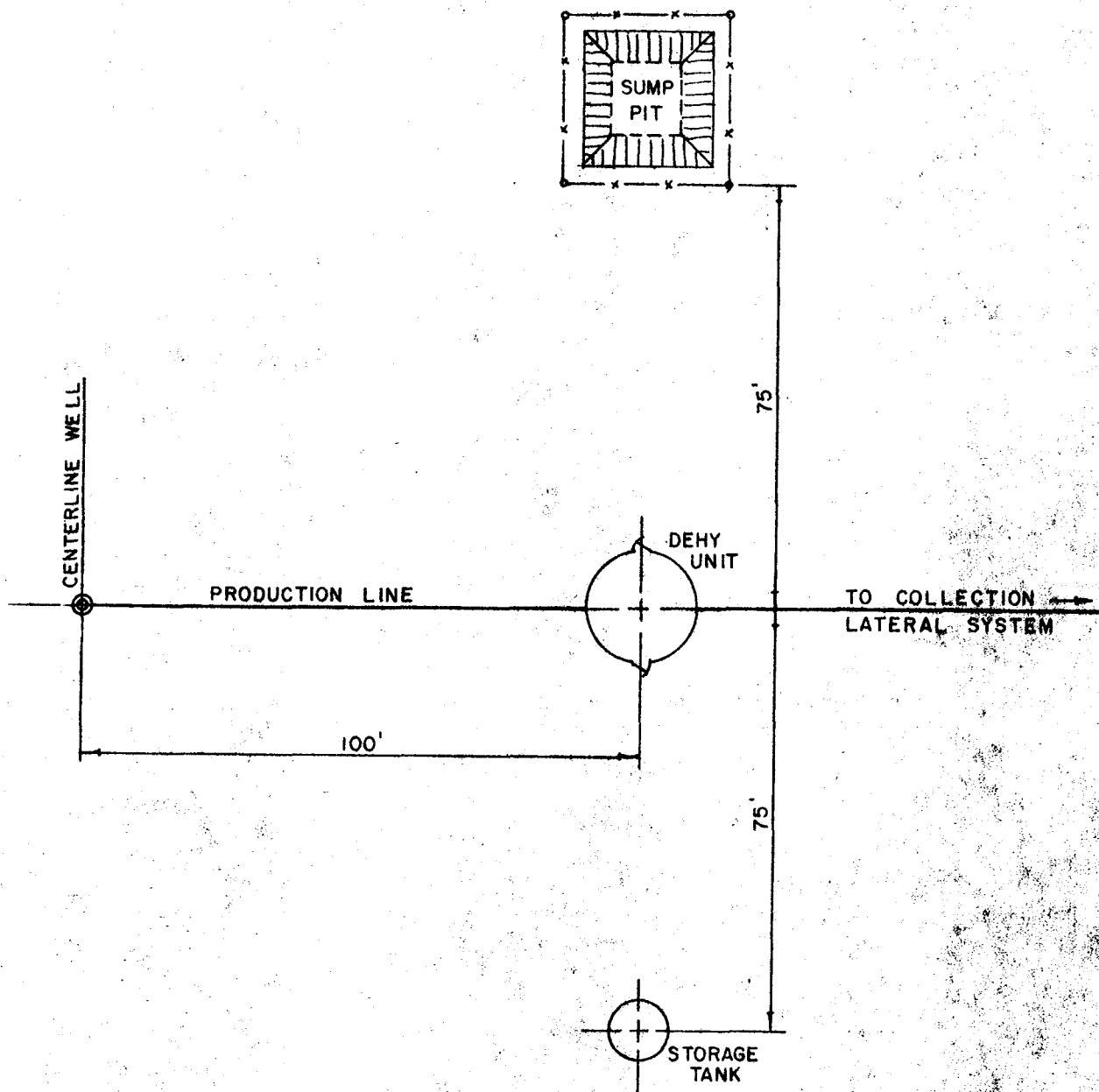
KEY MAP  
SCALE 1" = 100'

REVISIONS			
NO.	DESCRIPTION	DATE	BY

 <b>MOUNTAIN FUEL</b> SUPPLY COMPANY ROCK SPRINGS, WYOMING	
<b>PROFILES</b> FOR CLAY BASIN UNIT WELL N° 27-S WELL LOCATION SITE	
DRAWN: 11-15-76 G&B	SCALE: AS NOTED
CHECKED: G&B SMC	DRWG. NO. M-12313
APPROVED: RWH	2/2

FILE NO. A-11

SHEET 2 OF 2



REVISIONS				MOUNTAIN FUEL SUPPLY COMPANY ROCK SPRINGS, WYOMING	
NO.	DESCRIPTION	DATE	BY		
				<b>TYPICAL PRODUCTION FACILITIES LAYOUT FOR CLAY BASIN UNIT WELL N<sup>o</sup> 27-S</b>	
				DRAWN: 7/9/76 FJC	SCALE: NONE
				CHECKED: Gel SMF	DRWG. NO. M-12205
				APPROVED: RWH	

Well Name Clay Basin Unit Well No. 27-SLocation SE NW 16-3N-24EDaggett County, Utah

<u>Wellhead Equipment</u>	<u>Size</u>	<u>Pressure Rating</u>	<u>Pressure Test</u>
Surface Casing Flange	<u>10</u>	<u>3,000</u>	<u></u>
Casing Spool	<u></u>	<u></u>	<u></u>
Tubing Spool	<u>10 x 6</u>	<u>3,000</u>	<u>6,000</u>
Tubing Bonnet	<u>10 x 4</u>	<u>3,000</u>	<u>6,000</u>

<u>Flow Out Preventers</u> (Top to Bottom)	<u>Size</u>	<u>PSI Rating</u>	<u>PSI Test</u>	<u>Bag</u>	<u>Rams</u>
	<u>10</u>	<u>3,000</u>	<u>6,000</u>	<u></u>	<u>Blind</u>
	<u>10</u>	<u>3,000</u>	<u>6,000</u>	<u></u>	<u>4-1/2</u>
	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
<u>Gas Buster</u>	<u>Yes</u>	<u>X</u> <u>No</u>	<u>Degasser</u>	<u>Yes</u>	<u>X</u> <u>No</u>

Kill or Control Manifold

<u>2</u> <u>Size</u>	<u>3,000</u> <u>Pressure Rating</u>	<u>6,000</u> <u>Pressure Rating</u>	<u>No</u> <u>Pressure Rating Test</u>	<u>No</u> <u>Hydraulic Valves</u>
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<u>Auxiliary Equipment</u>	<u>Kelly Cock</u>	<u>X</u> <u>Yes</u>	<u>No</u>
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<u>Monitoring Equipment on Mud System</u>	<u>Yes</u>	<u>X</u> <u>No</u>
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<u>Full Opening Drill Pipe Stabbing Valve on Floor</u>	<u>X</u> <u>Yes</u>	<u>No</u>
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<u>Type of Drilling Fluid</u>	<u>X</u> <u>Water Base Mud</u>	<u>Air</u>	<u>Gas</u>	<u>Oil Base Mud</u>
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<u>Anticipated Bottom Hole Pressure</u>	<u>500</u> <u>PSI</u>
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# CHECKLIST JOCKEY EQUIPMENT

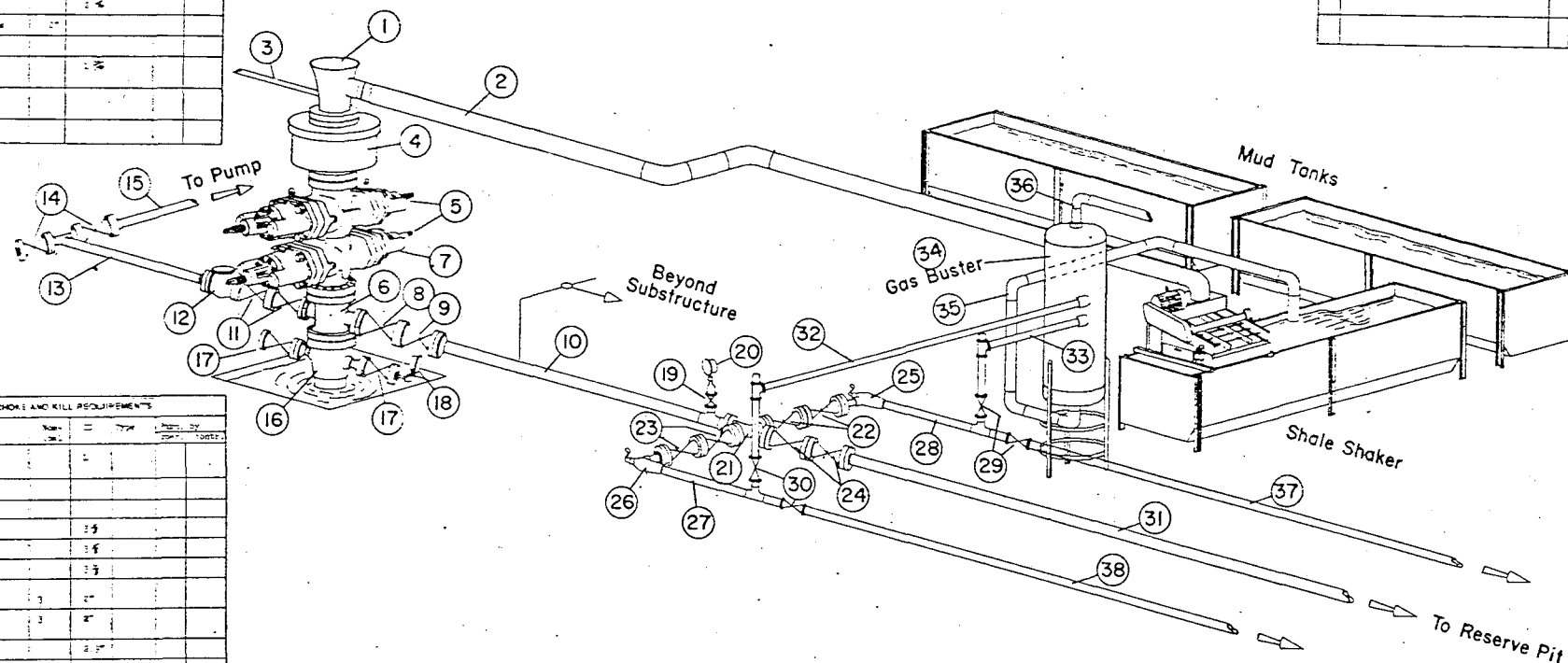
Contractor and operator to furnish name checked in:

STANDARD STACK REQUIREMENTS				
No.	Item	Qty.	Unit	Notes
1	Drilling Baffle			
2	Tooljoint			
3	Well Head Line	2"		
4	Annular Preventer			
5	Two 3/4" or 1" or 1 1/2" Drill Pipe			
6	Drilling Spool with 2" and 3" connections			
7	At least one 2" (3" and 4" also) line from outside to this well			
8	Valve Gate	1 1/2"		
9	Valve Gate (normally closed) Gate	1 1/2"		
10	Choke Line	2"		
11	Gate Valve	1 1/2"		
12	Choke Valve	1 1/2"		
13	Well Head	2"		
14	Valve Gate	1 1/2"		
15	Well Head to Pump	2"		
16	Drilling Head			
17	Valve Gate	1 1/2"		
18	Compound Pressure Valve			
19	Well Head			

## MOUNTAIN FUEL SUPPLY COMPANY 3000 psi BLOWOUT PREVENTION EQUIPMENT

SPECIAL CHOKES AND KILL REQUIREMENTS				

SPECIAL STACK REQUIREMENTS				



STANDARD CHOKES AND KILL REQUIREMENTS				
No.	Item	Qty.	Unit	Notes
1	Valve Gate	1		
2	Compound Pressure			
3	Choke Line	1 1/2"		
4	Valve Gate	1 1/2"		
5	Valve Gate	1 1/2"		
6	Valve Gate	1 1/2"		
7	Choke Line	1 1/2"		
8	Choke Line	1 1/2"		
9	Line to Separator	2 1/2"		
10	Line to Separator	2 1/2"		
11	Valve Gate	1 1/2"		
12	Valve Gate	1 1/2"		
13	Line to Res. Pit	2 1/2"		
14	Line to Separator	2 1/2"		
15	Line to Separator	2 1/2"		
16	Separator			
17	Discharge Line			
18	Test Line			
19	Line to Res. Pit	2 1/2"		
20	Line to Res. Pit	2 1/2"		

DEVELOPMENT PLAN FOR U.S.C.S. APPROVAL OF SURFACE USE  
MOUNTAIN FUEL SUPPLY COMPANY DRILLING WELLS

Well Name - Clay Basin Well No. 27- S

Field or Area - Clay Basin, Utah

1. Existing Roads -

- A) Proposed well site as staked - Refer to well location plan M- 12312 for location of well, access road and directional reference stakes.
- B) Route and distance from nearest town or locatable reference point to where well access route leaves main road - Refer to lateral map M- 9030 From the Wyoming-Utah state line to Rock Springs, Wyoming is 50 miles.
- C) Access road to location - Refer to lateral map M-9030 and well site map M- 12312 for access road from Wyoming-Utah state line to Clay Basin unit No. 27-S.
- D) If exploratory well, all existing roads within a 3-mile radius of well site - Not an exploratory well.
- E) If development well, all existing roads within a 1-mile radius - Refer to lateral map M-9030 for existing roads.
- F) Plans for improvement and/or maintenance of existing roads - No existing roads will be improved. All existing roads will be maintained as needed by Mountain Fuel equipment.

2. Planned Access Road -

- A) Width - 16' wide from shoulder to shoulder.
- B) Maximum grade - The maximum grade on the road is 8 percent.
- C) Turnouts - No turnouts will be constructed.
- D) Drainage design - A drainage ditch on the uphill side of the road will be constructed. It will be a minimum of one foot below the surface of the road. No water diversion ditches are anticipated.
- E) Location and size of culverts and description of major cuts and fills -
  - 1) For culvert size and location see drawing No. M-12312.
  - 2) No side hill cuts will be made.
- F) Surfacing material - No surfacing material will be needed either on the road or location.
- G) Necessary gates, cattle guards or fence cuts - No cattle guards, gates, or fence cuts are anticipated.
- H) New or reconstructed roads - The new road is center line flagged.

3. Location of Existing Wells -

- A) Water wells - None within a one mile radius.
- B) Abandoned wells - None within a one mile radius.
- C) Temporarily abandoned wells - None within a one mile radius.

- D) Disposal wells - None within a one mile radius.
  - E) Drilling wells - Both Clay Basin 24 and 25 are proposed wells and should be drilling soon.
  - F) Producing wells - Clay Basin unit well Nos. 1, 9, 13, 19 & 22 are productive gas well within a one mile radius.
  - G) Shut-in wells - No shut-in wells within a one mile radius.
  - H) Injection wells - Clay Basin wells 2, 3, & 11 are injection/withdrawal wells.
  - I) Monitoring or observation wells for other resources - No monitoring or observation wells within a one mile radius.
4. Location of Existing And/Or Proposed Facilities - Refer to lateral map M-9030.
- A) 1) Tank batteries - No tank batteries within a one mile radius.
  - 2) Production facilities - Each productive gas well has its own production equipment. Also, a compressor plant is located near unit 3. Also, a compressor plant for injection is being constructed near unit 3.
  - 3) Oil gathering lines - No oil gathering lines are located in the Clay Basin area.
  - 4) Gas gathering lines - Refer to area map M-9030. Laterals Nos. 55, 46, and 47 are buried gas lines. Lateral Nos. 270, 273, and 403 are surface gas lines.
  - 5) Injection lines - Several injection/withdrawal lines are located within the area. Refer to lateral map M-9030.
  - 6) Disposal lines - No disposal lines are located within a one mile radius.
- B) 1) Proposed location and attendant lines by flagging if off the well pad - The well will be used as a gas injection/withdrawal well. A line will be constructed from the well to the compressor site as shown on drawing M-9030. The line will be a buried 6 inch.
- 2) Dimensions of facilities - Refer to drawing No. M-12205.
- 3) Construction methods and materials - No construction materials are anticipated. The dirt work will be done with a backhoe, i.e., ditches, dehy base, tank base, etc.
- 4) Protective measures and devices to protect livestock and wildlife - The sump pit will be fenced as shown on drawing M-12205.
- C) Plans for rehabilitation of disturbed area no longer needed for operations after construction is completed - After construction is complete, areas of non-use will be restored and seeded.
5. Location and Type of Water Supply -
- A) Location of water - The water withdrawal point on Red Wash is located in the SW 1/4 of Section 22, T.12N., R. 105W. of the 6th P.M., Sweetwater County, Wyoming.
  - B) Method of transporting water - Water will be hauled by tank truck from Red Creek to Unit Well No. 24. The well access road, as shown on drawing M-9030, will be used as the water haul road.

- C) Water well to be drilled on lease - No water well will be drilled.
6. Source of Construction Material -
- A) Information - No construction material will be used.
- B) Identify if from Federal or Indian land -
- C) Where materials are to be obtained and used -
- D) Access roads crossing Federal or Indian lands -
7. Method for Handling Waste Disposal -
- A-D) Cutting, drilling fluids, produced fluids, and sewage will be placed in the mud pit.
- E) Garbage and other waste material will be placed in the burn pit.
- F) After drilling operations have been completed, the location will be cleared of all litter and the trash will be burned in the burn pit. The burn pit will be covered over. The mud pit liquids will be pumped out and dumped on the existing roads. The mud pit will be covered over.
8. Ancillary Facilities - There now is a camp approximately 1/2 mile to the east with housing and general camp facilities including a landing strip. Water is piped to the camp from a spring to the west. See drawing M-9030.
9. Well Site Layout - See drawing Nos. M-12313 and M-12312.
10. Plans for Restoration of Surface -
- A) After drilling operations, the well site will be cleared and cleaned and the burn pit filled in. Should the well be a dry hole, the surface will be restored to the extent that it will blend in with the landscape. The reserve pit liquids will be pumped out and dumped on the existing roads.
- B) Revegetation and rehabilitation of the location and access road will be done to comply with Bureau of Land Management recommendations.
- C) Prior to rig release, pits will be fenced and so maintained until clean up.
- D) If oil is in the mud pit, overhead flagging will be installed to keep birds out.
- E) Clean up will begin within two months after drilling operations have been completed and the land will be restored at this time.
11. Other Information -
- A) The location lies on the top of a ridge, which runs east and west. The ground slopes downward north about 20 percent and about four percent upward south. The soil is sandy clay with gravel rock. The vegetation is salt sage, sage brush and native grass. No access road is needed since there is an existing road on the location.
- B) The surface belongs to J.R. Broadbent.
- C) Water can be located in Red Creek. The Clay Basin camp is occupied by Mountain Fuel personnel. No historical, archeological or cultural sites are in the area to my knowledge.
12. Lessee's or Operator's Representative -  
D. E. Dallas, Drilling Superintendent, P. O. Box 1129, Rock Springs, Wyoming 82901, telephone 307-362-5611.

13. Certification -

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Mountain Fuel Supply Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Date November 22, 1976

Name D.E. Dallas  
Title Drilling Superintendent

cdk

STATE OF UTAH  
DIVISION OF OIL, GAS, AND MINING

\*\* FILE NOTATIONS \*\*

Date: Dec 30, 1976  
Operator: Mountain Fuel Supply Co  
Well No. 27-S (State)  
Location: Sec. 16 T. 3N R. 24E, County: Daguerre

File Prepared

☒

Entered on N.I.D.

☒

Card Indexed

☒

Completion Sheet

☒

Checked By:

Administrative Assistant: [Signature]

Remarks: Gas Storage - OK Order

Petroleum Engineer: [Signature]

Remarks:

Director: 7

Remarks:

Include Within Approval Letter:

Bond Required ☐

Survey Plat Required ☐

Order No. 164-1

Surface Casing Change ☐  
to \_\_\_\_\_

Rule C-3(c), Topographical exception/company owns or controls acreage  
within a 660' radius of proposed site ☐

O.K. Rule C-3 ☐

O.K. In Clay Basin Unit ☐

Other:

☐ Letter Written



STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

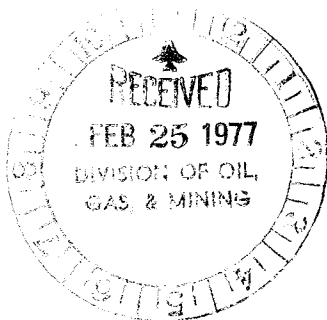
<b>1. OIL WELL</b> <input type="checkbox"/> <b>GAS WELL</b> <input type="checkbox"/> <b>OTHER</b> <input type="checkbox"/> <u>Gas Storage</u>		<b>5. LEASE DESIGNATION AND SERIAL NO.</b> ML - 807
<b>2. NAME OF OPERATOR</b> Mountain Fuel Resources, Inc.		<b>6. IF INDIAN, ALDOTTEE OR TRIBE NAME</b> -P
<b>3. ADDRESS OF OPERATOR</b> P. O. Box 1129, Rock Springs, Wyoming 82901		<b>7. UNIT AGREEMENT NAME</b> Storage Agreement Clay Basin Gas
<b>4. LOCATION OF WELL</b> (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  860' FSL, 840' FEL SE SE		<b>8. FARM OR LEASE NAME</b> Unit Well
<b>14. PERMIT NO.</b> API No.: 43-009-30018		<b>9. WELL NO.</b> 27-S
<b>15. ELEVATIONS</b> (Show whether DF, RT, GR, etc.) GR 6584.50'		<b>10. FIELD AND POOL, OR WILDCAT</b> Clay Basin Gas Storage
		<b>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA</b> SE SE 16-3N-24E
		<b>12. COUNTY OR PARISH</b> Daggett
		<b>13. STATE</b> Utah

**16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Supplementary history</u> <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

**17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS** (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Depth 2242', spudded 2-17-77, ran and cemented 9-5/8" surface casing, drilling.



**18. I hereby certify that the foregoing is true and correct**

SIGNED

*R. G. Myers*

TITLE

Manager, Drilling and  
Petroleum Engineering

DATE

Feb. 21, 1977

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

## INTEROFFICE COMMUNICATION

FROM T. M. Colson

Rock Springs, Wyoming

CITY

STATE

TO R. G. Myers

DATE February 24, 1977

SUBJECT Tentative Plan to Drill

Unit Well No. 27-5

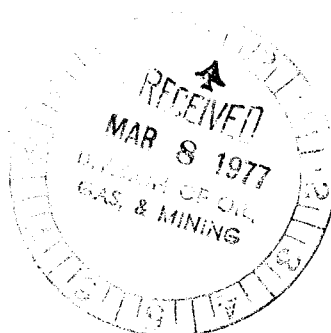
Clay Basin Field

Attached for your information and files is a tentative plan to drill the above-captioned well. This plan was written in accordance with the Geologic Prognosis prepared by D. L. Reese.

TMC/gm

Attachment

cc: R. D. Cash  
E. R. Keller (3)  
G. A. Peppinger (3)  
A. J. Marushack  
A. K. Zuehlendorff  
D. E. Dallas  
A. J. Maser (3)  
J. E. Adney  
E. J. Widic  
B. M. Steigleder  
E. A. Farmer  
D. L. Reese  
U.S.G.S.  
State  
Paul Zubatch  
P. E. Files (4)



From: C. R. Owen

Rock Springs, Wyoming

To: T. M. Colson

February 24, 1977

Tentative Plan to Drill  
Unit Well No. 27  
Clay Basin Field

This well will be drilled to total depth by \_\_\_\_\_ Drilling Company. One work order has been originated for the drilling and completion of this well, namely \_\_\_\_\_, Drill Unit Well No. 27, Clay Basin Field, located in the SE SE Sec. 16, T. 3 N., R. 24 E., Daggett County, Utah. An 8-3/4-inch hole will be drilled to a total depth of 6060 feet and 7-inch O.D. casing run. It is planned to complete the well as a gas storage well in the Dakota formation. 100 feet of cores will be cut, starting at a point 50 feet from the bottom of the Mowry and through 50 feet of the Dakota storage sand. Surface elevation is at 6584.5 feet KBM.

1. Drill 12-1/4-inch hole to approximately 330 feet KBM.
2. Run and cement approximately 300 feet of 9-5/8-inch O.D., 36-pound, K-55, 8 round thread, LT&C casing. The casing will be cemented by Dowell with 165 sacks of regular Type "G" cement, which represents theoretical requirements plus 100 percent excess cement for 9-5/8-inch O.D. casing in 12-1/4-inch hole with cement returned to surface. Cement will be treated with 775 pounds of Dowell D-43A. Plan on leaving a 10 foot cement plug in the bottom of the casing after displacement is completed. Floating equipment will consist of a Baker guide shoe. The top and bottom of all casing collars will be spot welded in the field and the guide shoe will be spot welded to the shoe joint in the Rock Springs Machine Shop. The bottom of the surface casing should be landed in such a manner that the top of the 10-inch 3000 psi casing flange will be at ground level. A cellar three feet deep will be required. Prior to cementing, circulate 50 barrels of mud. Capacity of the 9-5/8-inch O.D. casing is 24 barrels.
3. After a WOC time of 6 hours, remove the landing joint and wash off casing collar. Install a NSCo. Type "B" 10-inch 3000 psi regular duty casing flange tapped for 9-5/8-inch O.D. casing. Install a 2-inch extra heavy nipple, 6-inches long, and

a Demco (2000 psi WOG, 4000 psi test) ball valve on one side outlet of the casing flange and a 2-inch extra heavy bull plug in the opposite side. Install a 10-inch 3000 psi double gate hydraulically operated blowout preventer with blind rams in the bottom and 4-1/2-inch rams in the top and finish nipping up. After a WOC time of 12 hours, pressure test surface casing, all preventer rams, and Kelly-cock to 1000 psi for 15 minutes using rig pump and drilling mud. The burst pressure rating for 9-5/8-inch O.D., 36-pound, K-55, 8 round thread, LT&C casing is 3520 psi.

4. Drill 8-3/4-inch hole to the total depth of 6060 feet or to such depth as the Geological Department may recommend. The mud will consist of 2 percent potassium chloride water to 4500 feet. Mud up with the potassium Dexdrid Drispac system at this point to allow a 3 cc. water loss at 5810 feet when the coring begins. The 3 cc. water loss will be maintained from the coring point to total depth at 6060 feet. If lost circulation is encountered, only acid soluble lost circulation material will be used. A mud cleaner will be used from surface to total depth to remove undesirable solids from the mud system and to keep the mud weight to a minimum. A Company Geologist will be on location to check cutting samples; 10 foot samples from 5350 feet to total depth. 100 feet of cores will be cut from approximately 5810 feet to 5910 feet (50 foot Mowry core, 50 foot Dakota core). Anticipated tops are as follows:

	Approximate Depth (Feet KBM)
Mancos	Surface
Frontier	5,410
Mowry	5,610
Dakota	5,860
Total Depth	6,060

5. Run a dual induction laterolog (2-inch linear scale and 5-inch logarithmic scale) and a compensated density/gamma ray/caliper from total depth at 6060 feet to 4060 feet. The 2000 feet logged represents the minimum footage for each log.
6. Assuming gas storage zones of good quality are present as indicated by log analysis, go into hole with 8-3/4-inch bit and drill pipe to total depth to condition mud prior to running production casing. Pull bit laying down drill pipe and drill collars.
7. Run 7-inch O.D. casing as outlined in Item No. I, General Information, through the deepest producing zone as indicated by log analysis. A Baker 7-inch O.D., 8 round thread, Type G circulating differential fillup collar and guide shoe will be run as floating equipment. Rig up Dowell and cement casing with 50-50 Pozmix cement. Bring cement top behind the 7-inch O.D. casing 1000 feet above the uppermost producing zone as indicated by log analysis. Circulate 300 barrels of drilling mud prior to beginning cementing operations. Capacity of the 7-inch O.D. casing is approximately 238 barrels. Cement requirements will be based on actual hole size as determined by the caliper portion of the formation density log. Rotate casing while circulating, mixing, and displacing cement. Displace cement with water. Bump plug with 2500 psi and hold for 15 minutes to pressure test casing. Minimum burst pressure of the 7-inch O.D., 23-pound, K-55 casing is 4360 psi.
8. Immediately after cementing operations are completed, land the 7-inch O.D. casing with full weight of casing on slips in the 10-inch 3000 psi casing flange and record indicator weight. Install NSCo. Type B 10-inch 3000 psi by 6-inch 3000 psi

tubing spool. Pressure test primary and secondary seals to 2500 psi for 5 minutes. Minimum collapse pressure for 7-inch O.D., 23-pound, K-55, 8 round thread, LT&C casing is 3280 psi. Install a steel plate on the 6-inch 3000 psi tubing spool flange.

9. Release drilling rig and move off location.
10. Move in and rig up a completion rig.
11. Install a 6-inch 5000 psi hydraulically operated double gate preventer with blind rams on bottom and 2-3/8-inch tubing rams on top.
12. After a WOC time of at least 50 hours, rig up Dresser Atlas and run bond log and perforating formation control log from plugged back depth to top of cement behind the 7-inch O.D. casing.
13. After a WOC time of at least 56 hours, pick up and run a 6-1/4-inch bit on 2-3/8-inch O.D., 4.7-pound, V-55, 8 round thread, EUE tubing to check plugged back depth. Rig up and displace drilling mud out of hole with drip oil. Pull and lay down 2-3/8-inch O.D. tubing.
14. Rig up Dresser Atlas and run a casing potential profile log from total depth to the bottom of the surface casing at 300 feet KB.
15. Rig up Dresser Atlas perforating truck and perforate the Dakota storage sand with 2 HPF jumbo jet shots. The interval to be perforated will be chosen after the open hole logging has been reviewed and evaluated.
16. Rig up Dresser Atlas and run a Baker Model FB-1 (size 87-40) as follows:
  - Baker Model FB-1 (4.0-inch I.D. through packer)
  - 6 foot Baker millout extension (4.0-inch I.D.).
  - 10 foot Baker seal bore protector (4.0-inch I.D.) changeover.



6 feet 3-1/2-inch O.D., 9.2-pound, J-55, 8 round EUE pup joint.

Baker Model "F" non-ported seating nipple (size 2.81).

6 feet 3-1/2-inch O.D., 9.2-pound, J-55, 8 round EUE pup joint.

Baker Model "R" non-ported no-go seating nipple (size 2.75).

Set packer so that the bottom of the assembly is 30 feet above the perforations.

Perforations will be chosen after the open-hole logging is completed.

17. Install 4-1/2-inch rams in preventer. Pick up a Baker locator seal assembly and a Baker Model "L" sliding sleeve and run tubing as follows:

1 NSCo. DP4-H-1 tubing hanger tapped 4-1/2-inch O.D., 8 round thread, LT&C, top and bottom.

4-1/2-inch O.D., 11.6-pound, J-55, 8 round thread, LT&C pup joints as required to space out.

Approximately 189 joints 4-1/2-inch O.D., 11.6-pound, J-55, 8 round thread, LT&C tubing.

Baker Model "L" 4-1/2-inch O.D. sliding sleeve (size 3.812), in open position.

1 6 foot 4-1/2-inch O.D., 11.6-pound, J-55 pup joint.

Baker Model "G" locator seal assembly with 10 feet of seal extensions (I.D. 3.0-inches).

Land tubing in packer with 10,000 pounds compression. Space out and land in wellhead.

18. Install upper portion of wellhead.

19. Swab fluid out of wellbore. Run a short production test.

GENERAL INFORMATION

I. The following tubular goods have been assigned to the well.

<u>Description</u>	<u>Approximate Gross Measurement (feet)</u>	<u>Availability</u>
	<u>Surface Casing</u>	
9-5/8-inch O.D., 36-pound, H-40, 8 round thread, ST&C casing	330	Warehouse Stock
	<u>Production Casing</u>	
7-inch O.D., 23-pound, K-55, 8 round thread, LT&C casing (Bottom 400 feet will be rough coated)	6,200	To be purchased
	<u>Production Tubing</u>	
4-1/2-inch O.D., 11.6-pound, J-55, 8 round thread, LT&C tubing	6,300	To be purchased

II. All ram type preventers will have hand wheels installed and operative at the time the preventers are installed.

III. Well responsibility - D. L. Reese

STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

### SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Gas Storage		5. LEASE DESIGNATION AND SERIAL NO. ML - 807	
2. NAME OF OPERATOR Mountain Fuel Resources, Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME -	
3. ADDRESS OF OPERATOR P. O. Box 1129, Rock Springs, Wyoming 82901		7. UNIT AGREEMENT NAME Clay Basin Gas Storage Agreement	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  860' FSL, 840' FEL SE SE		8. FARM OR LEASE NAME Unit Well	
14. PERMIT NO. API No.: 43-009-30018		9. WELL NO. 27-S	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) KB 6606.15' GR 6584.50'		10. FIELD AND POOL, OR WILDCAT Clay Basin Gas Storage	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SE SE 16-3N-24E	
		12. COUNTY OR PARISH Daggett	13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Supplementary history</u> <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

TD 6000', landed 9-5/8"OD, 36#, K-55, casing at 303.15' KBM and cemented with 200 sacks regular type G cement treated with 2% calcium chloride, landed 7"OD, 23#, K-55, casing at 5987.23' KBM and set with 550 sacks of 50-50 Pozmix cement treated with 2% gel, rig released March 5, 1977, waiting on completion tools.

18. I hereby certify that the foregoing is true and correct

SIGNED <u>R. L. Myers</u>	TITLE <u>Manager, Drilling and Petroleum Engineering</u>	DATE <u>March 9, 1977</u>
---------------------------	--	---------------------------

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

### SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Gas Storage		5. LEASE DESIGNATION AND SERIAL NO. ML - 807	
2. NAME OF OPERATOR Mountain Fuel Resources, Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME -	
3. ADDRESS OF OPERATOR P. O. Box 1129, Rock Springs, Wyoming 82901		7. UNIT AGREEMENT NAME Storage Agreement Clay Basin Gas	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  860' FSL, 840' FEL SE SE		8. FARM OR LEASE NAME Unit Well	
14. PERMIT NO. API No.: 43-009-30018		9. WELL NO. 27-S	
15. ELEVATIONS (Show whether DF, RT, OR, etc.) KB 6606.15' GR 6584.50'		10. FIELD AND POOL, OR WILDCAT Clay Basin Gas Storage	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SE SE 16-3N-24E	
		12. COUNTY OR PARISH Daggett	13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	

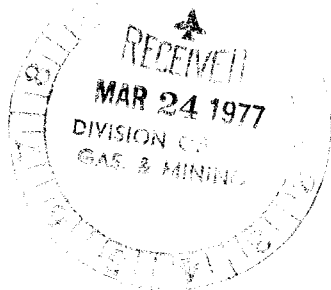
SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) <input checked="" type="checkbox"/> Supplementary history	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

TD 6000', PBD 5820', rigged up work over unit on 3-11-77, perforated Dakota from 5792' to 5832' with 2 holes per foot, set packer at 5658', landed 4-1/2" tubing at 5668.94', swabbed recovering drip oil, rig released 3-15-77. Final report.



18. I hereby certify that the foregoing is true and correct

SIGNED

*R. L. Myers*

TITLE

Manager, Drilling and  
Petroleum Engineering

DATE March 23, 1977

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

## INTEROFFICE COMMUNICATION

FROM T. M. Colson

Rock Springs, Wyoming  
CITY STATE

TO R. G. Myers

DATE March 11, 1977

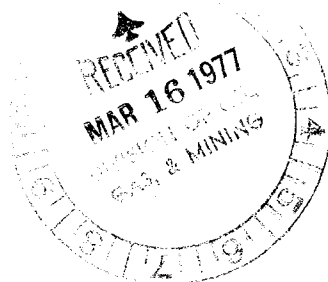
SUBJECT Tentative Plan to Complete  
Unit Well No. 27  
Clay Basin Field

Attached for your information and files is a tentative plan to complete the above-captioned well.

TMC/gm

Attachment

cc: R. D. Cash  
E. R. Keller (3)  
G. A. Peppinger (3)  
A. J. Marushack  
A. K. Zuehlsdorff  
D. E. Dallas (2)  
G. C. Nelson (2)  
J. E. Adney  
E. J. Widic  
E. A. Farmer  
D. L. Reese  
U.S.G.S.  
State *[Signature]*  
B. M. Steigleder  
P. E. Files (4)



From: R. L. Rasmussen

Rock Springs, Wyoming

To: T. M. Colson

March 11, 1977

Tentative Plan to Complete  
Unit Well No. 27  
Clay Basin Field

The above well was drilled to a total depth of 6000 feet KBM on March 5, 1977 by Mountain Fuel Resources. The well was drilled as a gas storage well in the Dakota formation. The following is a tentative plan to complete the above-captioned well.

NOTE: KB is 21.65 feet above ground level.

1. Move in and rig up a completion rig.
2. Install a 6-inch 5000 psi hydraulically operated double gate BOP with blind rams in bottom and 2-3/8-inch tubing rams on top.
3. After a WOC time of at least 50 hours, rig up Dresser Atlas and run cement bond log and perforating formation control log from plugged back depth to top of cement behind the 7-inch O.D. casing.
4. After a WOC time of at least 56 hours, pick up and run a 6-1/4-inch bit and casing scraper dressed for 7-inch O.D., 23-pound casing on 2-3/8-inch O.D., 4.6-pound, J-55 tubing to plug back depth. Rig up and displace water out of hole with drip oil. Approximately 230 barrels of drip oil will be required. Pull and lay down tubing, casing scraper, and 6-1/4-inch bit. Install 4-1/2-inch tubing rams.
5. Rig up Dresser Atlas perforating truck and perforate the Dakota storage sand with two Jumbo Jet shots per foot as follows:

5792 feet to 5832 feet KBM

Measurements are from the Schlumberger formation density log dated March 3, 1977. Depths must be correlated with the Dresser Atlas cement bond log dated March 8, 1977.



6. Run a Baker Model FB-1 (size 87-40) packer as follows:

1 Baker Model FB-1 packer (4.0-inch I.D. through packer).

6 foot Baker millout extension (4.0-inch I.D.).

10 foot Baker seal bore protector (4.0-inch I.D.) changeover.

6 foot 3-1/2-inch O.D., 9.2-pound, J-55, 8 round thread, EUE pup joint.

1 Baker Model "F" non-ported seating nipple (size 2.81).

6 foot 3-1/2-inch O.D., 9.2-pound, J-55, 8 round thread, EUE pup joint.

1 Baker Model "R" non-ported no-go seating nipple (size 2.75).

Set packer so that the bottom of the assembly is 30 feet above the perforations.

7. Pick up a Baker locator seal assembly and a Baker Model "L" sliding sleeve and run tubing as follows:

1 NSCo. H-1 tubing hanger tapped 4-1/2-inch O.D., 8 round thread, LT&C, top and bottom.

4-1/2-inch O.D., 11.6-pound, J-55, 8 round thread, LT&C pup joints as required to space out.

Approximately 155 joints 4-1/2-inch O.D., 11.6-pound, J-55, 8 round thread, LT&C tubing.

Baker Model "L" 4-1/2-inch O.D. sliding sleeve (size 3.812), in open position.

1 6 foot 4-1/2-inch O.D., 11.6-pound, J-55 pup joint.

Baker Model "G" locator seal assembly with 10 feet of seal extensions (I.D. 3.0-inches).

Land tubing in packer with 10,000 pounds compression. Space out and land in wellhead.

8. Install upper portion of wellhead.

9. Swab fluid out of wellbore. Run a short production test.

"not drawn to scale"

Drilled by MTFuel

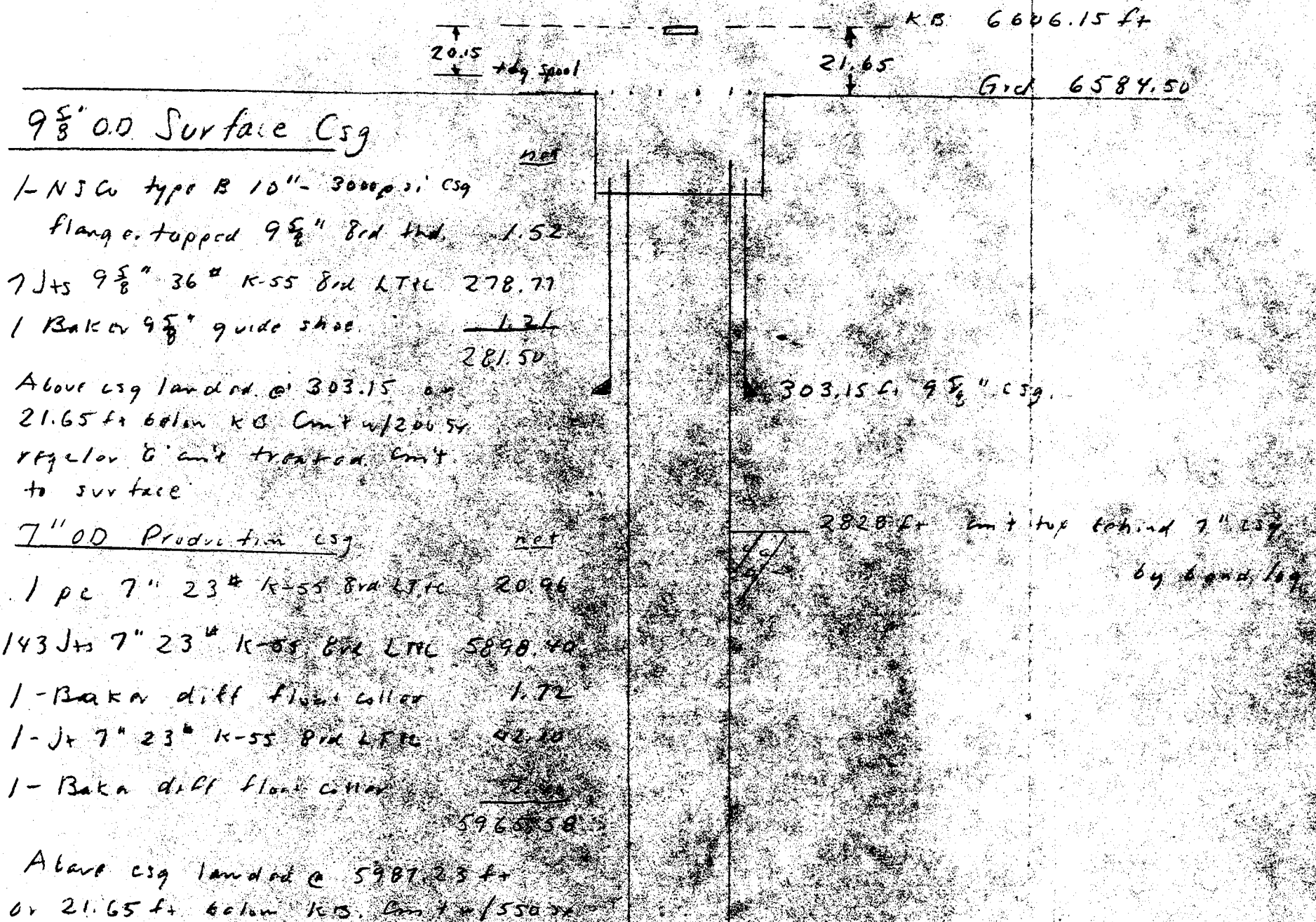
3-10-77

Present Status of Well

UNIT WELL 27-5

Clay Basin Field

3-11-77/275



STATE OF UTAH

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

OIL &amp; GAS CONSERVATION COMMISSION

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☐ Other Gas Storage

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other ☐

2. NAME OF OPERATOR

Mountain Fuel Resources, Inc.

3. ADDRESS OF OPERATOR

P. O. Box 1129, Rock Springs, Wyoming 82901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface

860' FSL, 840' FEL SE SE

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

API No.: 43-009-30018

15. DATE SPUDDED

2-17-77

16. DATE T.D. REACHED

3-3-77

17. DATE COMPL. (Ready to prod.)

3-15-77

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\*

KB 6606.15 GR 6584.50

19. ELEV. CASINGHEAD

-

20. TOTAL DEPTH, MD &amp; TVD

6000

21. PLUG, BACK T.D., MD &amp; TVD

5820

22. IF MULTIPLE COMPL., HOW MANY\*

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

0-6000'

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

5792-5832' Dakota - Gas Storage

26. TYPE ELECTRIC AND OTHER LOGS RUN

Dual Laterolog, Compensated Formation Density

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
<u>9-5/8"</u>	<u>36</u>	<u>303.15</u>	<u>12-1/4</u>	<u>200</u>	<u>0</u>
<u>7</u>	<u>23</u>	<u>5,987.23</u>	<u>8-3/4</u>	<u>550</u>	<u>0</u>

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
<u>4-1/2</u>	<u>5668.94</u>	<u>5658</u>

31. PERFORATION RECORD (Interval, size and number)

5792-5832', jet, 2 holes per foot

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.\* PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD ( <i>Flowing, gas lift, pumping—size and type of pump</i> )				WELL STATUS ( <i>Producing or shut-in</i> )	
Shut in		Gas Storage				Shut in	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
			→				
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
-	-	→	-	-	-		

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

Logs as above, Well Lithology to be sent at a later date.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

R. L. Myers

TITLE

Manager, Drilling and Petroleum Engineering

DATE

March 23, 1977

\*(See Instructions and Spaces for Additional Data on Reverse Side)

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29:** "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

## 37. SUMMARY OF POROUS ZONES:

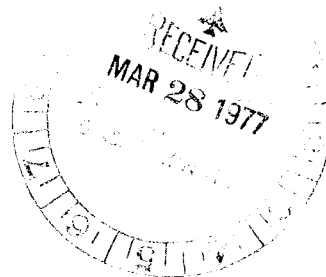
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF: CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.

## 38.

### GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Log tops:		
Frontier	5411'	
Mowry	5613	
Dakota	5777'	



COMPLETION REPORT

Well: Clay Basin Unit No. 27-S Date: April 12, 1977  
Area: Clay Basin Field Lease No: \_\_\_\_\_  
☐ New Field Wildcat ☒ Development Well ☐ Shallower Pool Test  
☐ New Pool Wildcat ☐ Gas Storage ☐ Deeper Pool Test  
☐ Extension  
Location: 860 feet from South line, 840 feet from East line  
SE  $\frac{1}{4}$  SE  $\frac{1}{4}$   
Section 16, Township 3 North, Range 24 East  
County: Daggett State: Utah  
Operator: Mountain Fuel Resources  
Elevation: KB 6606.50 Gr 6584.50 Total Depth: Driller 6000 Log 5988  
Drilling Commenced: February 17, 1977 Drilling Completed: March 3, 1977  
Rig Released: March 5, 1977 Well Completed: March 15, 1977  
Sample Tops: (unadjusted) Log Tops:  
None reported  
Mancos Surface  
Frontier 5411  
Mowry 5613  
Dakota 5777  
Sample Cuttings: None  
Status: Gas Storage injection-withdrawal well  
Producing Formation: Dakota  
Perforations: 5792-5832 w/2 HPF jumbo jet shots per foot  
Stimulation: None  
Production: None  
Plug Back Depth: 5820  
Plugs: None  
Hole Size: 12 1/4" to 320; 8 3/4" to 6000  
Casing/Tubing: 9 5/8" to 303.70 w/200 sacks, 7" to 5987.23 w/550 sacks;  
Logging - Mud: 4 1/2" to 5668.94 in a packer set at 5658  
None  
Mechanical: DIL (300-5962) FDC (3950-5988)  
Contractor: Loffland Brothers Company  
Completion Report Prepared by: G.G. Francis  
Remarks: API No. 43-009-30018

COMPLETION REPORT (cont.)

Page 2

Well: Unit No. 27-S

Area: Clay Basin Field

Cored Intervals (recovery): 5729-5739 (7); 5739-5778 (39); 5778-5829 (51)

Tabulation of Drill Stem Tests: None

<u>No.</u>	<u>Interval</u>	<u>IHP</u>	<u>IFP (min.)</u>	<u>ISIP (min.)</u>	<u>FFP (min.)</u>	<u>FSIP (min.)</u>	<u>FHP</u>	<u>Samples Caught</u>	<u>Remarks</u>
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FIELD Clay Basin STATE Utah COUNTY Daggett SEC. 16 T. 3N R. 24E

COMPANY Mountain Fuel Resources FARM Unit WELL NO. 27-S

LOCATION 860' FSL, 840' FEL ELEV. KB 6606.50 GR 6584.50

DRILLING COMMENCED February 17, 1977 COMPLETED March 15, 1977

RIG RELEASED March 5, 1977 TOTAL DEPTH 6000

CASING RECORD 9-5/8" to 303.70 w/200 sacks; 7" to 5987.23 w/550 sacks

TUBING RECORD 4-1/2" to 5668.94 in a packer set at 5658

PERFORATIONS 5792-5832 w/2 HPF jumbo shots per foot

I. P. GAS None reported OIL None

SANDS

SHUT-IN SURFACE PRESSURES None reported

REMARKS

	FROM	TO
Core #1 (5729-5740) Rec. 7 ft.		
Shale, medium dark gray to medium gray, medium hard, thinly laminated, low angular oblique and vertical fractures common with some highly polished slickensided bedding surfaces.	5729	5736
No recovery	5736	5740
Core #2		
Shale, medium light gray in upper part and light gray in lower part, silty and slightly calcareous, thinly laminated in upper part.	5739	5742.3
Shale, medium gray, thinly laminated throughout with oblique to vertical fractures common, very slightly calcareous throughout.	5742.3	5751
Shale, medium gray, very faintly laminated with oblique to vertical fractures common, fish scales common.	5756	5769
Siltstone, light gray, hard, with apparent increase in particle size downward.	5769	5770.6
Shale, medium light gray, soft and chalky.	5770.6	5771
Shale, medium gray, medium hard, with common fish scale fossils.	5771	5779
Core #3		
Shale, medium gray, hard, silaceous and silty at base, fish scales common (Mowry Formation).	5779	5782.7
Sandstone, medium light gray, fine to medium grained, poorly sorted, subangular-subrounded, calcareous, porous and permeable, structureless (Marine).	5782.7	5784

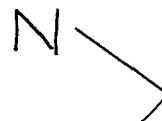
FIELD Clay Basin SEC. 16 T. 3N R. 24E PAGE 2  
FARM \_\_\_\_\_ Unit \_\_\_\_\_ WELL NO. 27-S  
COMPANY Mountain Fuel Resources

=====

	<u>FROM</u>	<u>TO</u>
Sandstone and shale interbedded; sandstone, light gray fine grained. Fairly well sorted, subrounded, calcareous, low porosity and permeability: shale, medium gray, hard and slightly calcareous, entire interval is burrow mottled (Marine).	5784	5788
Sandstone, light brownish gray to light tan, fine grained, very well sorted, subrounded, calcareous, burrow mottled in lower part with low angular cross lamina in upper part (Marine).	5788	5790.5
Sandstone, medium gray to light gray, unit has pebble size rock fragments at base grading upward to medium grained sand, laminated in lower part, low porosity and permeability (Fluvial).	5790.5	5796.1
Sandstone, medium gray, light brown gray, fine to coarse grained, poorly sorted, with distinct low angular cross lamina throughout and matrix supported pebbles throughout. Dark staining in lower part of unit.	5796.1	5804
Sandstone, light grayish brown to light tan, very fine grained, porous and permeable, subangular-subrounded, slightly calcareous with high porosity and permeability. Interval grades from a low angular cross laminated sequence downward into high angular cross-laminated sequence. Dark staining from 5819-5821 (Fluvial).	5804	5829

Clay Basin Unit # 27 Sec 16, 3N, 24E

Ch. 14 June 88



access  
road.



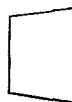
emergency pit



line heater.



dehydrator.



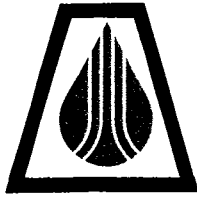
meter run



well head.

42-381 50 SHEETS 5 SQUARE  
42-382 100 SHEETS 5 SQUARE  
42-389 200 SHEETS 5 SQUARE  
MADE IN U.S.A.





## QUESTAR PIPELINE COMPANY

79 SOUTH STATE STREET • P. O. BOX 11450 • SALT LAKE CITY, UTAH 84147 • PHONE (801) 530-2400

June 23, 1988

CERTIFIED MAIL

RETURNED RECEIPT REQUESTED

#P 879 571 459

Bureau of Land Management  
Utah State Office  
CFS Financial Center  
324 S. State Street  
Salt Lake City, UT 84111-2303

Re: Name Change  
Mountain Fuel Resources, Inc.  
to Questar Pipeline Company

Gentlemen:

Enclosed for your files and information is a certified copy of the Articles of Amendment to the Articles of Incorporation of Mountain Fuel Resources, Inc. dated March 7, 1988, indicating that Mountain Fuel Resources, Inc. changed its name to Questar Pipeline Company.

Questar Pipeline Company holds interests in the following Federal Oil and Gas Leases in Utah:

*Novels on gas held.  
w/ CA*

*CA well - RT - OR's Mt. Fuel Resources* - U-9712-A - Questar 100%  
U-11246 - Assignment pending to "Questar Energy Co."  
SLC-045051(A) - OR's  
SLC-045051(B) - OR's  
SLC-045053(A) - OR's  
SLC-045053(B) - OR's  
SLC-062508 - OR's  
SLC-070555 - OR's  
SLC-070555(A) - OR's  
? Agreement No. 14-08-0001-16009  
(Clay Basin Gas Storage Agreement)

Please note and adjust your records in accordance with the above and furnish verification of your receipt of this notice to the undersigned.

Sincerely,

*[Signature]*  
J. B. Neese  
Senior Landman

JBN/sdg

Enclosure

3100  
U-09712-A  
et al  
(U-942)

*C. Seare*  
*3/9/89*

### DECISION

Questar Pipeline Company : Oil and Gas Leases  
P.O. Box 11450 : U-09712-A et al  
Salt Lake City, Utah 84147 :

#### Corporate Name Change Recognized

Acceptable evidence has been received establishing that Mountain Fuel Resources, Inc. has changed their name to Questar Pipeline Company. Accordingly, the surviving company, Questar Pipeline Company, is recognized as holding all interests in Federal oil and gas leases which were held by Mountain Fuel Resources, Inc. We are changing our records with respect to the attached listing of oil and gas leases. If there are any other leases that will be affected, please contact this office.

**/s/ M. Willis**

**ACTING** Chief, Minerals  
Adjudication Section

Enclosure  
List of Leases

cc: All District Offices, Utah  
MMS, AFS  
MMS, BRASS  
920, Teresa Thompson  
Clay Basin Unit File

CSeare:s1 3/9/89:1642f

RECEIVED

JAN 28 2004

DIV. OF OIL, GAS & MINING

List of Leases

Overriding Royalties

U-09712-A  
U-011246

Operating Rights

SL-045051-A & B  
SL-045053-A & B  
SL-062508  
SL-0700555  
SL-070555-A  
SL-045049-A & B

Clay Basin Gas Storage Agreement  
Agreement No. 14-08-0001-16009

## OPERATOR CHANGE WORKSHEET

## ROUTING

1. GLH

2. CDW

3. FILE

Change of Operator (Well Sold)

Designation of Agent/Operator

X Operator Name Change

Merger

The operator of the well(s) listed below has changed, effective:

3/7/1988

**FROM: (Old Operator):**

N1070-Wexpro Company  
PO Box 45360  
Salt Lake City, UT 84145-0360  
Phone: 1-(801) 534-5267

**TO: (New Operator):**

N7560-Questar Pipeline Company  
PO Box 11450  
Salt Lake City, UT 84147  
Phone: 1-(801) 530-2019

CA No.

Unit:

**WELL(S)**

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
COALVILLE GAS STORAGE 8	10	020N	050E	4304330192	99990	Fee	GS	A
COALVILLE GAS STORAGE 9	10	020N	050E	4304330193	99990	Fee	GS	A
COALVILLE GAS STORAGE 10	10	020N	050E	4304330244	99990	Fee	GS	A
COALVILLE GAS STORAGE 12	09	020N	050E	4304330249	99990	Fee	GS	A
CLAY BASIN UNIT 5	20	030N	240E	4300915629	1025	Fee	GS	A
CLAY BASIN UNIT 3	16	030N	240E	4300915627	1025	State	GS	A
CLAY BASIN UNIT 27-S	16	030N	240E	4300930018	1025	State	GS	A
CLAY BASIN UNIT 52-S	16	030N	240E	4300930048	1025	State	GS	A
CLAY BASIN UNIT 53-S	16	030N	240E	4300930049	1025	State	GS	A
CLAY BASIN UNIT 59-S	16	030N	240E	4300930055	1025	State	GS	A
CLAY BASIN UNIT 35-S	17	030N	240E	4300930026	1025	Federal	GS	A
CLAY BASIN UNIT 40-S	20	030N	240E	4300930031	1025	Federal	GS	A
CLAY BASIN UNIT 49-S	20	030N	240E	4300930045	1025	Federal	GS	A
CLAY BASIN UNIT 2	21	030N	240E	4300915626	1025	Federal	GS	A
CLAY BASIN 24-S	21	030N	240E	4300930015	1025	Federal	GS	A
CLAY BASIN UNIT 25-S	21	030N	240E	4300930016	1025	Federal	GS	A
CLAY BASIN UNIT 26-S	21	030N	240E	4300930017	1025	Federal	GS	A
CLAY BASIN 30-S	21	030N	240E	4300930019	1025	Federal	GS	A
CLAY BASIN UNIT 33-S	21	030N	240E	4300930024	1025	Federal	GS	A

## OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 1/13/2004
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 1/13/2004
3. The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 1/14/2004
4. Is the new operator registered in the State of Utah: YES Business Number: 649172-0142
5. If **NO**, the operator was contacted on: \_\_\_\_\_

6. (R649-9-2) Waste Management Plan has been received on:

IN PLACE

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: 3/9/1989

8. **Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, Transfer of Authority to Inject, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A

**DATA ENTRY:**

1. Changes entered in the Oil and Gas Database on: 1/29/2004
2. Changes have been entered on the Monthly Operator Change Spread Sheet on: 1/29/2004
3. Bond information entered in RBDMS on: 1/29/2004
4. Fee wells attached to bond in RBDMS on: 1/29/2004
5. Injection Projects to new operator in RBDMS on: n/a

**STATE WELL(S) BOND VERIFICATION:**

1. State well(s) covered by Bond Number: 965003032

**FEDERAL WELL(S) BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: 965002976

**INDIAN WELL(S) BOND VERIFICATION:**

1. Indian well(s) covered by Bond Number: n/a

**FEE WELL(S) BOND VERIFICATION:**

1. (R649-3-1) The NEW operator of any fee well(s) listed covered by Bond Number 965003033
2. The FORMER operator has requested a release of liability from their bond on: N/A  
The Division sent response by letter on: N/A

**LEASE INTEREST OWNER NOTIFICATION:**

3. (R649-2-10) The FORMER operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 1/29/2004

**COMMENTS:**



# NEW ENTITY NUMBERS ASSIGNED FEBRUARY 2004

ACCT	OPERATOR NAME	API NUM.	Sec	Twnsbp	Rng	WELL NAME	ENTITY	EFF DATE	REASON
N7560	Questar Pipeline Co	4300915629	20	030N	240E	Clay Basin Unit 5	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300915627	16	030N	240E	Clay Basin Unit 3	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930018	16	030N	240E	Clay Basin Unit 27-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930048	16	030N	240E	Clay Basin Unit 52-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930049	16	030N	240E	Clay Basin Unit 53-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930055	16	030N	240E	Clay Basin Unit 59-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930026	17	030N	240E	Clay Basin Unit 35-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930031	20	030N	240E	Clay Basin Unit 40-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930045	20	030N	240E	Clay Basin Unit 49-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300915626	21	030N	240E	Clay Basin Unit 2	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930015	21	030N	240E	Clay Basin 24-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930016	21	030N	240E	Clay Basin Unit 25-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930017	21	030N	240E	Clay Basin Unit 26-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930019	21	030N	240E	Clay Basin 30-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930024	21	030N	240E	Clay Basin Unit 33-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930030	21	030N	240E	Clay Basin Unit 39-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930044	21	030N	240E	Clay Basin Unit 48-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930046	21	030N	240E	Clay Basin Unit 50-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930047	21	030N	240E	Clay Basin Unit 51-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930054	21	030N	240E	Clay Basin Unit 58-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930056	21	030N	240E	Clay Basin Unit 60-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300915635	22	030N	240E	Clay Basin U 11 (RD Murphy)	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930021	22	030N	240E	Clay Basin 28-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930023	22	030N	240E	Clay Basin Unit 32-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930027	22	030N	240E	Clay Basin Unit 36-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage

Note to file: These entity numbers  
were changed to compliment the  
operator correction from 3/7/98